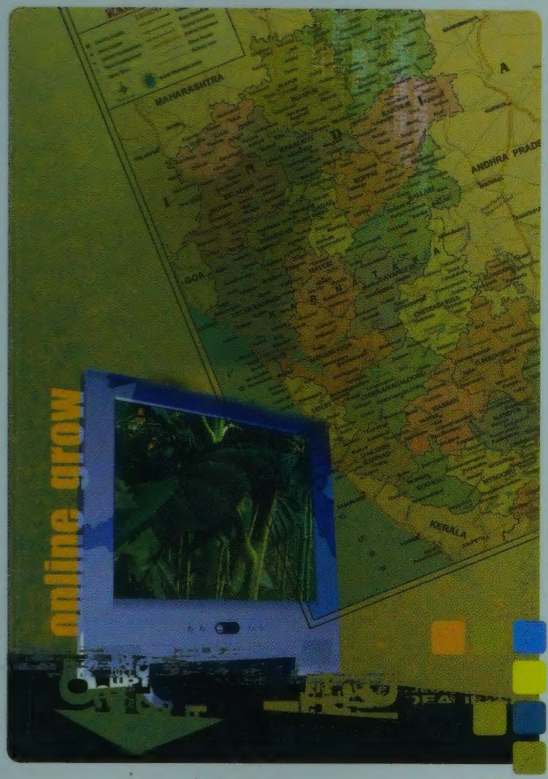
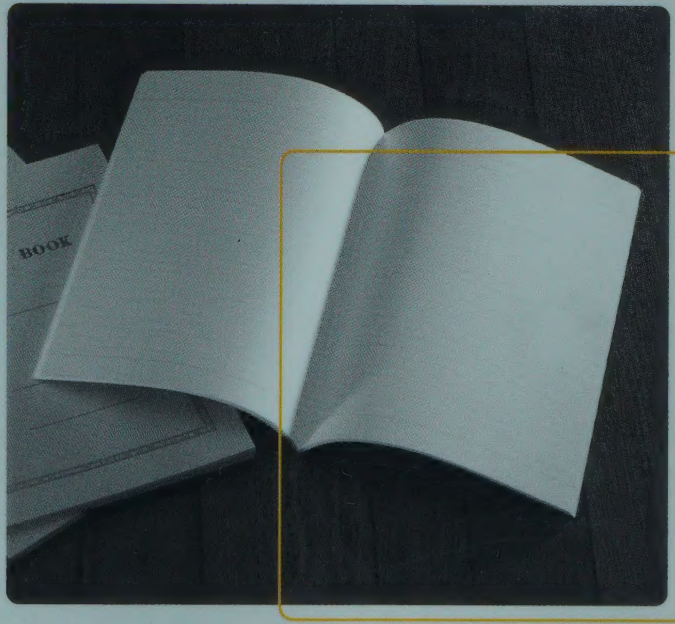
Research Studies Executive Summary





Karnataka Jnana Aayoga
(Karnataka Knowledge Commission)

Government of Karnataka

August 2011

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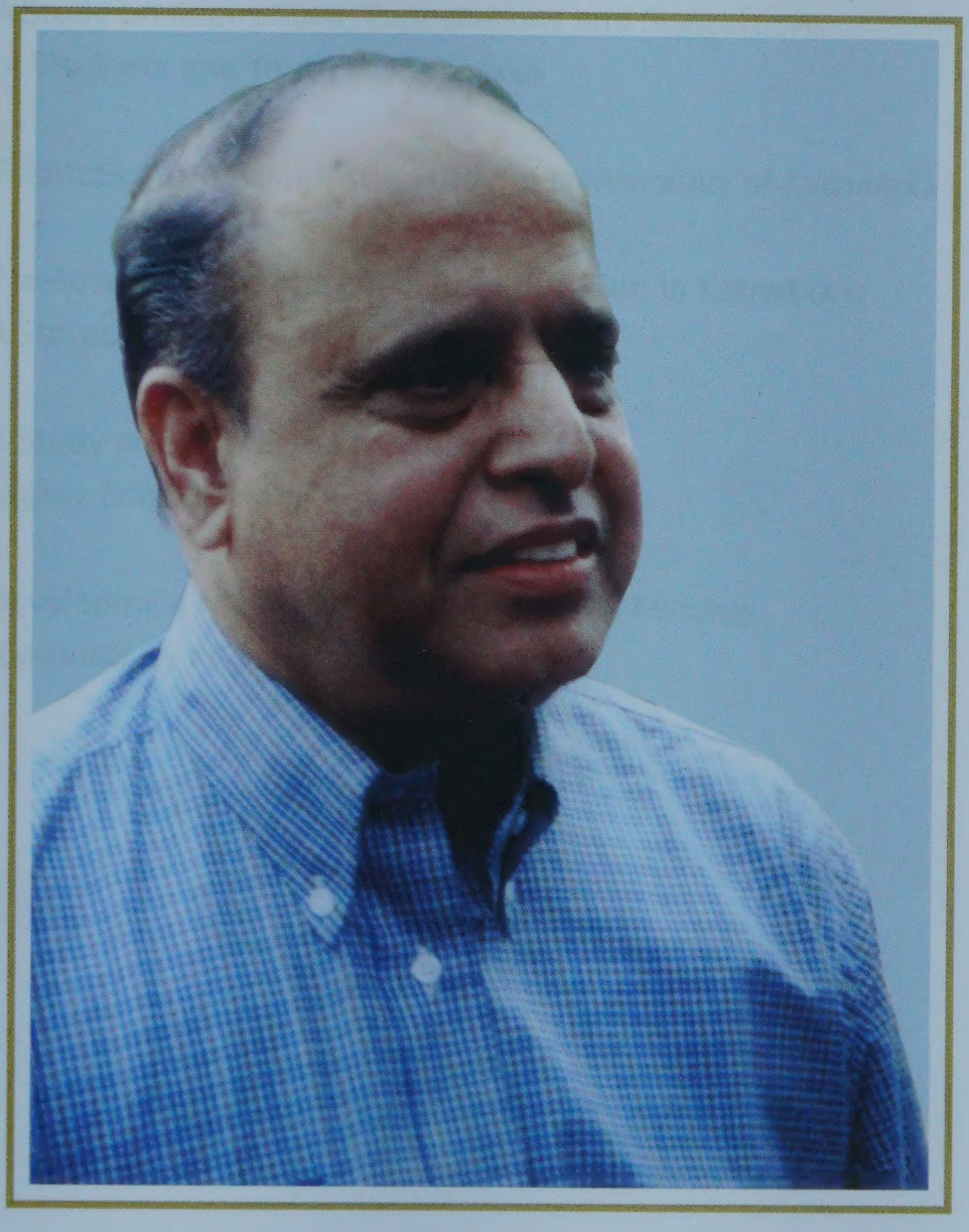

Dr. K. Kasturirangan

Chairman

Contents

1.	A study on Building Knowledge Society in Karnataka	5
2.	A Study on Aspirations, Expectations and Suggestions of Students and Youth of Karnataka	21
3.	Finances of Universities: A Study of Universities of Karnataka	35
4.	Pre-Service Elementary Teacher Education in Karnataka: A Status Study	45
5.	A Study on Gross Enrollment Ratio of Higher Education in Karnataka	59
6.	Developing a Model for Samudaya Jnana Kendras (Community Knowledge Centers)	65

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Member Secretary and Executive Director
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A Study on Building Knowledge Society in Karnataka

Preface

Karnataka Jnana Aayoga (Karnataka Knowledge Commission) was constituted in September 2008 under the Chairmanship of renowned space scientist Dr. K.Kasturirangan, who is also a Member of Planning Commission, Government of India. The mandate of the Commission is to transform Karnataka into a vibrant knowledge society. To accomplish the stated mandate, the Commission identified six focus areas, submitted sixty recommendations and commissioned six research studies.

As a prelude to transforming Karnataka into a vibrant knowledge society, a need was felt to understand national and global perspective on constituents of a knowledge society. Therefore, a research study titled A Study on Building Knowledge Society in Karnataka was envisaged with the following terms of reference-

- To define the concept of knowledge society in the context of Karnataka
- To create knowledge resource profile of Karnataka
- To map Karnataka's knowledge requirement
- To identify knowledge gaps (macro and micro)
- To evolve a roadmap to build knowledge society in Karnataka.

Based on the views of the various development agencies such as the World Bank, UN Department of Economic and Social Affairs and National Knowledge Commission on knowledge society, a framework was developed. The framework defines the three vital components of a knowledge society- 'creation' 'dissemination', and 'application' of knowledge. The framework is then applied to Karnataka. Resource mapping and profiling was undertaken to identify strengths and gaps in terms of knowledge creation, dissemination and application. The report presents a roadmap to transform Karnataka into a vibrant knowledge society by 2020.

I thank Mr. Ashok Varma, Executive Director of PricewaterhouseCoopers Private Limited and his team for carrying out this research study for KJA. I am thankful to Principal Secretary and other officers of the Department of Higher Education, GOK for their kind support. I also thank KJA Members for giving feedback on the report.

My special thanks to staff and research associates of the KJA for their support.

30th August, 2011

Prof. M.K. Sridhar, Ph.D.,
Member Secretary & Executive Director
Karnataka Jnana Aayoga
Government of Karnataka.

A Study on Building Knowledge Society in Karnataka

EXECUTIVE SUMMARY

The primary objective of this study is to define the elements of a knowledge society, assess the present status of these elements in the context of Karnataka, identify the gaps and propose specific recommendations to propel the desired transformation into a vibrant knowledge society, as envisioned in the Vision 2020 of the State. The study focuses on the five core sectors of Education, Health, Agriculture, Rural Development and Urban Development. The key mode of assessment in this study has been secondary data analysis supported by primary data collected through interactions with about 1250 respondents across the followingstakeholder groups covering 8 districts:

- *Beneficiaries of major government schemes and public services* (e.g. – college students, farmers who have got government assistance, pregnant women, etc.)
- *Service Providers* from government departments, private organization and not-for-profit organizations (e.g. - doctors at health centres, teachers at government schools, government, functionaries at the Gram Panchayats, etc.)
- *Researchers, academicians and policy planners* including sector experts, researchers and faculty at research institutions, government department functionaries at the secretariat, and KKC members

Concept of Knowledge & Knowledge Society in the context of Karnataka

Knowledge, in its purest form, is an embodiment of truth, well-justified belief and propositions. It links cause and effect relationships of natural and man-made phenomena. In practical terms, organised and well structured form of knowledge is a multidimensional concept drawn from various disciplines and schools of thought. Moreover Knowledge forms the very base of holistic human development in all societies. It is increasingly seen as one of the most important factors in determining a nation's competitive advantage and thereby influences the development of its people and society.

A Knowledge Society is centred on Knowledge for its development. It can be built when the inherent and new knowledge of a State rhythmically translates into competitiveness, productivity, social welfare, good governance and human development.

Key Components of a Knowledge Society: Encapsulating the major themes discussed around the subject of Knowledge and Knowledge Society, by various development agencies (such as the World Bank, UNDP, National Knowledge Commission, etc) the key components of a Knowledge Society have been identified. The key components are:

- *Knowledge Creation* - Engagements for producing new Knowledge
- *Knowledge Dissemination* - Engagements for spreading and sharing Knowledge
- *Knowledge Application*- Engagements for transforming knowledge into effective action

Characteristics of a Knowledge Society: The concept of Knowledge Society is centred on knowledge as the key component of economic, social, cultural and other human development activities, in contrast to other forms of societies where factors such as labour and capital constitute the dominant resource. The study identifies the five key characteristics of a Knowledge Society as:

- *Universal Presence of Knowledge* – There exists knowledge in all which is intrinsic in a society and its people. A Knowledge Society develops the capacities latent in human nature and integrates their expressions to foster development.
- *Universal Access* – In a Knowledge Society, existing and new knowledge on various sectors and aspects of the society are accessible to all based on necessity and feasibility.
- *Equity in Access* – Availability and access to knowledge, irrespective of age, gender, class, socio-economic, political or religious background, location etc is a key characteristic of a Knowledge Society.
- *Knowledge Empowerment* – With universal access and equity, each individual is connected to latest developments in the global, national, and

state-specific environ. This leads to empowerment of the citizens and penetration of excellence in the grass roots of the Knowledge Society.

- *Lifelong Learning:* is an intrinsic part of Knowledge societies, leading to continuous progress and development.

Knowledge Resource Profiling, Mapping Requirements & Identification of Gaps

Knowledge Creation in Karnataka: Based on analyses of input and output parameters which are used to measure the extent of research and development activities, strengths and weaknesses in knowledge creation in Karnataka have been identified, as listed below.

Strengths:

- *Bangalore has emerged as the 'Research & Innovation' hub with a number of premier institutions undertaking research.*
- *Districts like Mysore, Dakshina Kannada, Gulbarga, Shimoga & Dharwad have a strong base of Higher Educational Institutions and Industrial centres.*
- *The State stands at second position nationally with respect to Patent Applications made. These applications are made in a variety of research areas including IT, Biotechnology, Pharmaceuticals and Social Sciences etc.*

Weaknesses:

- *Districts other than Bangalore Urban lack in applied research.*
- *Science and Technology streams have Excess Demand for researchers whereas Humanities and Social Studies have Excess Supply.*
- *Lower transition of women after post graduation leading to lesser number of women researchers in the State*
- *Lack of strong incentives to practice quality research leading to a decline in interest towards academic research*
- *Insufficient inter-disciplinary research due to lack of collaborations between stakeholders engaged in R&D.*

- *Karnataka specific research forms a very small proportion of overall research activities and the outputs produced are not consolidated under a common formal platform.*

Knowledge Dissemination: Based on analyses of education, health and agricultural systems along with mediums of mass communication in rural and urban Karnataka, strengths and weaknesses have been identified, as listed below.

Strengths:

- The Gross Enrolment Ratio (GER) for Karnataka is higher than the national average and in some districts primary enrolment is almost universal.
- Compared to the national average, Karnataka has a higher number of general colleges and institutions for vocational training.
- EDUSAT has already been established at VTU providing e-learning and distance learning facilities to more than 100 colleges. EDUSAT has not reached majority of States in the country yet.
- Telemedicine facilities have already been established in all district hospitals of the State. It has not yet been introduced in majority of Indian States.
- More than 90 per cent of the villages are connected through wireless network.
- Currently there are 27.69 internet subscribers in Karnataka per 1000 population and it is ahead of the national average and states like Andhra Pradesh, Tamil Nadu and Kerala. Primary survey reveals that people are open and receptive to innovation and ICTs.
- There is a vast network of NGOs in Karnataka which are contributing to the States development through active knowledge dissemination.

Weaknesses:

- Lower transition rate from primary to secondary and secondary to higher education levels - only 34 per cent reach up to higher secondary and less than 10 per cent reach the graduation level.

- In case of secondary and higher levels of Education there is a gender and social disparity as the dropout rate among girls and backward sections of society seems to be comparatively higher.
- Infrastructure gap in the schools, especially with respect to RTE.
- Quality of primary and secondary education in the State needs attention, as determined by various studies including ASER 2010, NUEPA Flash Statistics, KSQAO etc.
- Seats in emerging areas like Biotechnology (in engineering colleges) have excess industrial demand for skilled labour with limited supply partly due to low proportion of government seats allocated to it.
- Shortfall in staffing at the Primary and Community Health Centres.

Knowledge Application: Based on analysis of education, health and agriculture related outcomes and developmental indicators pertaining to rural and urban development, strengths and weaknesses in knowledge application have been identified, as listed below.

Strengths:

- 67 per cent of the population in the state is in the age group of 15-59 years which establishes that the state has a favorable demographic advantage.
- The number of job seekers measured by live register ûgures of employment exchanges are exhibiting a decreasing trend.
- 'New Industrial Policy, 2009-14' aims to build a prosperous Karnataka through development of human and natural resources in a systematic, scientific and sustainable manner.
- Favourable policy thrust to encourage entrepreneurship and innovation, accompanied by receptiveness amongst the majority for the same (as revealed from Primary data analysis)
- Organic and sustainable farming have gained momentum in recent years.

Weaknesses:

- 55 per cent of the total population is not in the labour force.
- Around 50 per cent of the workers work in the agriculture sector which contributes to only 17% of GDP.
- A large proportion of the State's working population has low education levels with 25% of work force being illiterate and 49% of work force entering the labor market without secondary education.
- Lesser participation of women in the workforce. The contrast is more severe in the urban areas compared to the rural areas.
- Constraints relating to entrepreneurship exist in the areas of insufficient state support for early stage and seed funding, lack of basic and affordable infrastructure such as water, power and roads, etc.

Traditional Knowledge: Based on secondary and primary data analysis including interaction with researchers and academicians, strengths and weaknesses in the areas of traditional/indigenous knowledge collation and development have been identified, as listed below.

Strengths:

- A vast pool of traditional knowledge lies in agriculture, veterinary care, human health, handicrafts, performing arts, religion and astrology.
- Applications of Traditional Knowledge largely in the fields of science, medicine and linguistics form parts of academic curriculum in Karnataka and efforts have been undertaken to document it.
- Knowledge on languages such as Sanskrit and Kannada, Unani and Ayurvedic systems are also disseminated through University departments and Institutions of higher education in the State.
- Research Organisations have also been working towards identifying, assimilating and documenting Traditional Knowledge in the State and outside. For instance, the Centre for Ecological Sciences, IISc, Bangalore in collaboration with several other organizations has developed modules for recording traditional knowledge of local bio-resources in a document, called the "People's Bio-diversity Register" (PBR).

Weaknesses:

- Institutional arrangements presented constitute only a small portion of the total traditional knowledge pool given the vast pool that the state has in varied forms.
- Traditional Knowledge practitioners are scattered and not easily identifiable and that makes collation and documentation difficult.
- Documentation of knowledge of individuals with regard to biodiversity and its uses is an important part of PBR. In the process, special attention is given to the elderly persons who can also provide indigenous information and focus group discussions are also conducted to collate the same.
- Practitioners of traditional knowledge are not familiar with modern documentation methods and thus they are unable to effectively contribute to assimilation of traditional knowledge.

Roadmap for Knowledge Society in Karnataka

Knowledge creation depends on well-functioning markets - where individuals, investors, owners or managers are motivated through rewards which the application of such knowledge brings. Every society has distinctive assets and deficits; ones which understand their comparative advantage and design the policies to exploit the advantages raise the odds of success.

The educated and trained scientists and researchers, world class institutions and facilities facilitate interactions with global communities to generate fresh ideas and new perspectives. These fuel innovations which create commercial success and help transition towards the knowledge based society. Globalisation has accelerated the pace at which skills requirement change, a highly educated workforce is critical to support innovation and transition from industrial to knowledge-based economy and society.

Therefore, initially the challenge for Karnataka in its journey towards a knowledge based society, is not so much in developing world class institutions and trained researchers, but it would be in lifting a large population from relatively disadvantage position and bring them to a level where they can positively contribute to economy and society. The roadmap developed for the

transformation looks to achieve this in three phases – Inclusion, Expansion and Excellence.

Inclusion: The first stage in the transition is **"Inclusion"** wherein the initiatives are focused around achieving Universal access and equity. This involves a multidimensional, multi sectoral and equitable growth and development process. This involves building the basic foundation required in the five core sectors for knowledge society. The outcomes desired at the end of this stage include achieving 100% primary education level enrolment, functional literacy, achieving basic health and nutrition targets, introduction of Good Agricultural Practices[1], elimination of gender disparity, livelihood diversification in rural areas and improving accessibility of urban infrastructure.

Expansion: The second stage in the transition towards a Knowledge Society is **"Expansion"** wherein the focus is on sharing of knowledge, building on experiences and application of knowledge to create talent pools, creating competitive advantage in chosen areas. While the central theme in Inclusion stage would be on "Access" it moves to "Participation" in Expansion stage. The outcomes in this stage would be revolving around the success stories in research and development, number of skilled personnel to meet industry demands, improvement in health and nutrition indicators, reduction in rural urban socio-economic disparities and increasing contribution of knowledge based activities in the economy for the state of Karnataka.

Excellence: The last stage in transition is creating a continuous process of learning and development to create a society which not only meets the need of state but significantly contributes at national and global level. This entail integration with other knowledge societies and creating centres of excellence in the chosen areas. The outcomes in this stage would be revolving around innovations and research on sustainable development of mankind and environment, seamless sharing of knowledge and integration of Karnataka as a Knowledge Society with other vibrant national and global societies.

While the transition is divided into three stages, due to geographical and social disparities within the state, the Inclusion and Expansion stage coexist.

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1 Good Agriculture Practices is a concept defined by defined by the Food and Agriculture Organization (FAO) of the United Nations

For instance, while the issue of universal access to education is being addressed there would be simultaneous actions to improve the research and skill building to meet the industry requirements. The recommendations made herein cover the Inclusion and Expansion phases where the focus is to bring the society to a level of threshold knowledge where it is able to find these comparative advantages and pursue them earnestly to attain excellence.

Recommendations are provided for the five sectors separately and are largely focussed on propelling social inclusion and expansion in Karnataka. The chart for progression is formulated for the period of 2011 -2020 and leading to excellence and lifelong learning. Recommendations are derived from best practices, success stories and case studies nationally as well as globally[2] e.g. latest dialogues on quality education, example studies and experiences of World Bank initiatives, Social campaigns and success stories from India etc and cross cutting aspects like ICTs, private participation and innovation are also covered where relevant. Apart from a series of broad recommendations suggested in the study, certain specific recommendations have been included for each sector. The key imperatives to be achieved in each of the sector are:

Education:

a) Universal functional education

b) Improvement in quality of education and learning levels

c) Link education and skill building to market requirements

d) Channelling research into right areas and creating centres of excellence in areas of comparative advantage

Health:

a) Universal and affordable healthcare

b) Improvement in service delivery through appropriate staffing, capacity building, monitoring and reporting procedures.

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2 A list of selected global best practices and success stories is provided in Appendix VI.

c) Universal access to knowledge on basic health aspects like institutional delivery, child nutrition and development, hygiene, good practices on sanitation etc.

d) Channelling ICTs and private engagements to reach out to the difficult to reach populations.

e) Promotion of Medical Education by strengthening existing institutes and establishment of new centres of public health education, which undertake research and training.

Agriculture:

a) Higher productivity and output per worker

b) Spread of innovation in agriculture and related practices

c) Channelling research into right areas and creating centres of excellence in areas of comparative advantage

Urban Development:

a) Livelihood Enhancement

b) Development of social, technical and intellectual capital and infrastructure in Tier I and Tier II cities of Karnataka

c) Development of satellite urban centers in the State

d) Improvement in policy thrust and opportunities for Entrepreneurship Development

e) Strengthening the facilities and infrastructure for pursuing research and development

Rural Development:

a) Enhanced entrepreneurship and livelihood diversification in the rural economy (including rural farm and non-farm sector)

b) Link villagers, academicians, researchers and industry players through appropriate knowledge sharing

c) Documentation and development Traditional Knowledge

Knowledge Index: Finally, the analysis indicates that there exist geographical, gender and class disparities in access to knowledge. The study also reveals that small pockets of excellence in knowledge co-exist with absolute ignorance and low level of knowledge and skill amongst a large population in Karnataka. Transformation of Karnataka into a Knowledge Society would require the majority of the population achieving basic level of education with no disparities amongst them in accessing and using the knowledge as the presence of knowledge is central to theme of any Knowledge Society. In this context tracking performance of the individual districts in Karnataka becomes imperative based on selected parameters and key performance indicators to measure the progress made towards achieving the vision of transforming into a Knowledge Society.

In order to conceptualise the Index the study covers the formulation of a "District wise -Creation-Application-Dissemination Index **(D-CAD Index)**". It is expected that D-CAD Index will aid in identifying resources and means for their effective application at various levels – both in terms of geographical distribution and enriching specific domains. D-CAD Index aims to calculate the status of knowledge across all the districts and which can be aggregated to calculate the same at the state level. It is based on a 'District focused Approach' for policy implications and identifications of areas of need for government intervention. It takes into account twenty one odd parameters like GDP, Life Expectancy at birth, employment rates, dropout rates, number of libraries, Anganwadi centres, traditional knowledge assimilation, amongst others.

The implementation of the recommendations would require the state government to work in coordination with different bodies like Departments of Elementary, Higher and Technical Education, Department of Health, Department of Agriculture, Universities, autonomous research institutes, Industrial bodies and consortiums, Directorate of Vocational Training, etc. An effective approach to incorporate a robust structure of management and communication of Knowledge in the areas identified can result into the attainment of a vibrant knowledge society in the state and the current study strives to be an important step towards it.

Study on Perceptions, Aspirations, Expectations and Attitudes of Youth in Karnataka

Preface

Karnataka Jnana Aayoga (Karnataka Knowledge Commission) was constituted in September 2008 under the Chairmanship of renowned space scientist Dr. K.Kasturirangan, who is also a Member of Planning Commission, Government of India. The mandate of the Commission is to transform Karnataka into a vibrant knowledge society. To accomplish the stated mandate, the Commission identified six focus areas, submitted sixty recommendations and commissioned six research studies.

A unique approach of the KJA, in attaining its mandate has been soliciting the views and opinions of the primary stakeholders. During the course of its consultation meetings, the KJA realised that it is of prime importance to consult the youth of the State as they play a very key role in transforming Karnataka into a vibrant knowledge society. To reach out to the youth of Karnataka, who nearly constituted 40 pc of the total State population was a challenge. After series of deliberations, KJA commissioned a first of the kind mega survey based research study titled 'A Study on Perception, Aspirations, Expectations and Attitudes of Youth of Karnataka' with the following objectives:

1. Understand the perceptions of the youth
2. Measure the aspirations of the youth
3. Tap the expectations of the youth
4. Explore the attitudes and
5. Seek suggestions from youth on key issues.

The study captures the personal belief system of the youth and their perceptions on larger issues like socio-politico-economic system. In an attempt to cover the entire youth population, a representative sample of the universe was drawn from all over the State. The survey was conducted in 600 Polling Stations chosen from 150 Assembly Constituencies spread across the State. The target Sample size was set at 12600 of which 8999 Respondents were interviewed through a comprehensive questionnaire. The survey targeted youth in the age group of 15-35 years as respondents.

Based on the findings, the study presents policy recommendations to empower the youth of Karnataka. KJA is glad to present the findings and recommendations to all the concerned stakeholders for consideration.

I thank Dr. Sandeep Shastri, Pro-Vice Chancellor of Jain University, Bangalore for carrying out this mega study. I also thank the Principal Secretary and other officers of the Department of Higher Education for their kind support. A special thanks goes

to the Youth of the State for their kind support during the survey. My thanks also to the youth representatives who had attended our stakeholders' consultation meetings. I am thankful to the staff and research associates of KJA for all the hard work put in to accomplish this study.

I hope and wish that the findings of the study would provide inputs to youth policy formulation by the state of Karnataka.

30th August, 2011

Prof. M.K. Sridhar, Ph.D.,
Member Secretary & Executive Director
Karnataka Jnana Aayoga
Government of Karnataka.

Study on Perceptions, Aspirations, Expectations and Attitudes of Youth in Karnataka

EXECUTIVE SUMMARY

The study of the perceptions, aspirations, attitudes and expectations of the youth in Karnataka aims at providing a snapshot of the 'world' of the youth in the State. This is the first state-wide and exclusive survey based study of the perception of young people. It is hoped that these findings will help policy makers understand the 'vision' and 'world view' of a new generation in the state. It was decided that the study would cover young people in the state in the 15 to 34 age group. The lower age limit was chosen as it was felt that the survey method of eliciting information would not be suitable for those below that age. The upper limit was fixed keeping in mind the yardstick used by the Government to define who are the youth.

The objectives of the present study include: a) Understand the perceptions of youth in Karnataka today; b) Measure the aspirations of the youth in Karnataka today; c) Tap the expectations of the youth in Karnataka today; d) Explore the attitudes of the youth in Karnataka today

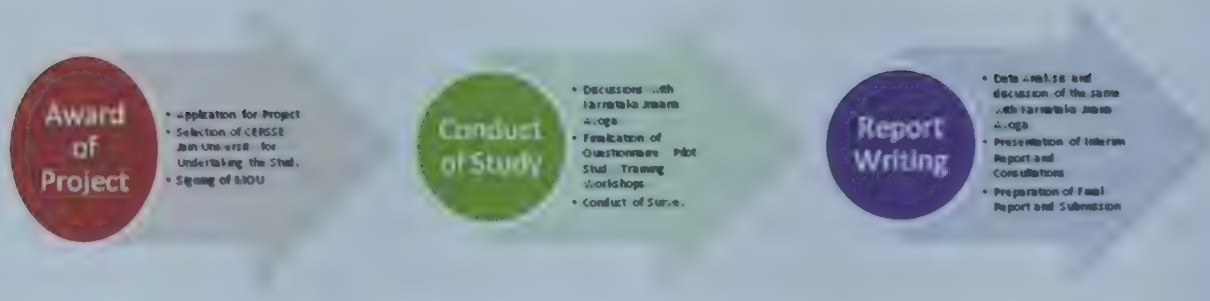
The study was primarily undertaken through the survey instrument. A review of the profile of the sample indicates that it mirrors the larger universe it was meant to represent.

Choosing the Sample

150 Assembly Constituencies
4 Polling Stations in each Assembly Constituency - 600 Polling Stations
21 names from voters list (18 34 age group)
14 names identified as household for choosing those in 15-18 age group
12600 : Target sample
8999 : Achieved Sample

The timeline for the study was as follows

Timelines for the Study



Feb – April 2010 **May – Sept 2010** **Oct 2010 – Feb 2011**

The study was divided into thematic chapters. Presented below are the key findings from each of the chapters and the policy recommendations made.

FAMILY FRIENDS AND BEYOND

The Family as an institution continues to be central to the life of the youth in Karnataka. Across regions, in all social groups, in diverse economic circumstances, youth continue to endorse the centrality of the family. The element of 'change' is seen in the attitude of young people in the state, when they favour brining up their children in a manner different from how they were brought up.

Young people in the state endorsed the democratic essence of decision making on matters concerning their lives. While being an integral part of the decision making process, they acknowledge the role and influence of their parents also. This acknowledgement is made even by youth who are employed and have started their own families.

Parental influence in the life of the youth is seen in the assertion by young people that parents have the strongest influence over them followed by their siblings. Parental influence decreases as we move from a village to an urban area and correspondingly sibling influence increases.

Young people tend to trust their friends most followed by relations and teachers. The people that young people trust is directly linked to the

socialization process a young person experiences. If those belonging to other castes and religions are low on trust it is more likely because of the limited opportunities for interaction with them. A changing reality across the state is that young people interact much more with those from the opposite gender. This is today increasingly accepted and more the social norm in towns and villages.

Young people in the state did report to experience discrimination. The most commonly felt form of discrimination was on economic grounds. Caste based discrimination was also mentioned, especially by Dalit and Tribal youth. Young women did make the point that gender based discrimination was also encountered by them. Religion was not a major factor of discrimination and this was endorsed by youth from minority religious groups.

HOPE AND ASPIRATIONS – TRIALS AND TRIBULATIONS OF YOUTH

A new generation of young Kannadigas had interesting priorities and aspirations. High education was an important priority for youth. Those who already had access to higher education did not see it as a major priority.... Those who had been denied access saw it high on their priority list. Their aspirations indicate that they are aligned with the vision of the state of making it a knowledge society.

Securing basic amenities was yet another priority for young people. This aspiration cut across all social groups and variables. Being socially responsible was an aspiration of a significant chunk of the youth. This was either a reflection of their active involvement in social work already or a reflection of a desired future course of action. This was a clear priority with rural youth. Youth also stressed on the fact that society must give the younger generation more responsibility. This both represents the aspiration of a new generation as also their frustration of not being provided with the opportunities that they believe that they deserve.

The competitive spirit among youth was very much on display when young people asserted that they would like to achieve more than others. Young people in the state were more aware and confident about their capabilities. Urban youth and those with access to higher education appeared to internalize that competitive spirit much more than others. The materialistic

instinct among young people was clearly on display when they asserted tha making money was important to be happy.

The dichotomy between individual autonomy and being part of a grou identity continued as a dilemma for most young people. This was eviden when they conceded that they were not always in control of what happene in their lives and they had to often do things which were not right. Youn people in metropolitan Bengaluru seemed more caught up in this dilemma a compared to those in smaller towns and villages.

The highest anxiety among young people was linked to their career and jo prospects. This anxiety was more visible among the rural youth and youn people from among the dalits and tribals.

LIFESTYLE CHOICES OF THE YOUNG

The most common free time activity of young people was watching movie and going out with friends. The habit of reading books and magazines wa not very common among youth in Bengaluru. In towns and small cities, the habit of reading was still very much in evidence among young people. This could change with the spread and availability of internet in semi- urban and rural areas.

Young people were very keen to dress up in the latest style. A caveat needs to be added at this stage. This was more a reflection of an aspiration and not necessarily something they were able to practice. While it was clearly an urban phenomenon, the rural youth too were increasingly influenced by the same.

POLITICS, ECONOMY AND GOVERNANCE

When asked about the one thing that they would like to change, some favoured strategies to reduce poverty and inequality. They also expressed their frustration about the corruption and mal-administration and wished to reform the same. Ensuring compulsory education, generating employment opportunities and providing health care were the other priorities high-lighted.

Did young people believe that government takes care of the interests of all? Close to two thirds of young people in the state felt that the government

takes care of the interests of some only or none at all. Those who said some generally identified them as the rich people or those close to the ruling party. Young people were clearly unhappy about the inability of governments to meet the expectations of common people. Most youth favoured the current policy of reservations in higher education. The upper castes and those in Bengaluru were more likely to oppose reservations as compared to others.

Young people from newly empowered social groups and the disadvantaged sections were increasingly frustrated with the injustice that the system meted out to them. They often favoured stronger and more aggressive means of expressing their dissent as the only means of securing social justice. Many young people seemed to conclude that violence alone could help achieve their legitimate goals. The fact of political equality and the reality of social inequality is clearly mirrored in the views of the youth of the state.

EMPOLYMENT OPPORTUNITIES: VISION AND EXPECTATION

Young people in the state still favour a government job over working for the private sector. Those in small towns and cities (save Bengaluru) were more enamoured of government jobs than others. The parental educational attainment did influence the employment choice of young people. While the father's education level did influence the preference for government or private jobs, the mother's being educated influenced the young people even more in their choice of working for the government or the private sector.

Youth seek a government job in view of the security it offers. Given the revised pay-scales, youth may also find government jobs more attractive from this perspective too. The cynic could always argue that there is also a link between preference for government jobs and desire for a job that provides a reasonable income on account of the perception that government jobs have great scope for sourcing extra-constitutional means of earning wealth. In spite of the influence of globalization, young people prefer to remain within the state rather than venturing out to other parts of the country and beyond.

A NEW GENERATION'S VISION FOR KARNATAKA

It was heartening to note that an overwhelmingly high percentage of young people in the State were proud to call themselves Kannadigas. They saw no conflict between their identity as Kannadigas and Indians.

When asked what was the biggest challenge facing the state, they highlighte limited employment opportunities and the rampant corruption. Youn people being worried about their employment prospects, is a natura expectation and the idealism among young people could be responsible fo their frowning on maladministration and corruption. The basic amenities o water supply, electricity and roads, was also mentioned by the respondents While the need for employment opportunities was highlighted in towns an big cities, corruption was cited more often in rural areas.

There was a reasonable degree of awareness of select governmen programmes. Among the respondents (and their families) there were not too many respondents who stated that they were the beneficiaries of these programmes. The distribution of the benefits seemed uneven and did not seem to have penetrated rural Karnataka.

Young people were not too convinced that the government in the state was focusing on their welfare. Every region in the state had its distinct problems and these were voiced quiet assertively by the young respondents. They rightly identified what was the biggest challenge ion their region. The challenges faced by urban Karnataka were very different from the ones faced by those in rural Karnataka. Respondents were sensitive to the same and hoped that the government too would respond with the same degree of sensitivity.

Young people were asked to reflect on the educational system in the state. Most of those who had accessed education, had been to government schools. Two thirds of the respondents were happy with their school/college experience. This may not necessarily be a reflection of the quality and access (to students) that the education institutions provided but more an acknowledgement of the opportunity to learn, especially given the fact that many of them may have been first generation learners. The younger among the youth appeared more impatient with the educational facilities they were being given access to as compared to the older generation. Close to half the youth said the school/college experience was stressful. There was clearly a heightened expectation from the youth of the state in terms of policies, programmes and schemes targeted at the welfare and well-being of young people.

POLICY RECOMMENDATIONS

Flowing from the conclusions of the Youth Survey, the Study wishes to put forward a few policy recommendations. It is hoped that these recommendations would help all stake holders who are actively involved in promoting the welfare and wellbeing of the state, to frame policy initiatives.

1. Karnataka prides itself as being in the forefront of creating a 'knowledge society', The young people in the state share this vision and are committed to taking this forward. It would be useful if the state harnesses the knowledge pool and resource available in the state to create a robust, engaged and vibrant knowledge society.

2. The study clearly shows that the family continues to be an important social institution in the lives of young people. It would be useful for government to target policies and programmes which aim at 'family welfare' rather than mere 'individual wellbeing'.

3. The new generation is brimming with ideas and has heightened expectations from the state. There is a negative perception on the role of the government/state among young people. There appears to be a lack of 'engagement' with public life among the youth. It is vital that the government channelize the unbounded energy of the new generation and harness their potential for the well- being of the state. The state needs to strategize to involve the younger generation and sensitize them to the priorities of the government and ensure that those priorities are aligned to the 'world of the youth'.

4. Given the vital role and influence that parents play in the life of young people (especially in their formative years), it is important that educational institutions partner with parents in facilitating a conducive environment for the holistic development of the new generation. Partnering with parents is vital. More often than not educational institutions (both private and government) provide limits space and opportunities for parents to partner in the process of creating a knowledge society. This needs to be immediately remedied.

5. The study unequivocally endorses the fact that the mother has a critical role the play in the shaping of the attitudes and aspirations of her

children. The education of the girl child must be pursued with renewed vigour.

6. The towns and cities appear to be at the cusp of social empowerment economic transformation and political awakening. It is vital that policy makers focus on these emerging urban centres. Given the vision aspirations and dreams of young people in the emerging urban areas, opportunities to channelize the same need to be developed and sustained by policy makers.

7. There needs to be a serious expansion of opportunities and capacities across rural Karnataka. Young people in rural areas are often frustrated with the lack of opportunities and avenues. Information kiosks which provide the latest information with state of the art facilities need to be made available for young people.

8. In rural and the newly emerging urban Karnataka there need to be more opportunities for interaction among young people across caste group and religions. The survey noticed that there was limited interaction among young people across caste and religious groups. This is more on account of lack of opportunities for such interaction rather than an inherent desire not to interact. Such opportunities would also in the long run, facilitate greater harmony between social groups in society.

9. The educational system needs to be provide greater opportunities for young people to be involved in social work. While youth have expressed a desire to be involved in social activity they were constrained by the lack of institutional opportunities for the same.

10. Most young people in the state are caught up in a dilemma of how best to maintain their individual autonomy even while becoming part of a group identity. They are often unsure as to whether they are unconsciously on account of a range of pressures surrendering their individual space to conform to group norms. It would be useful if the younger generation is exposed to life skills training. This would help them make meaningful choices and assert their individuality even as they conform to larger social/group norms.

11. Young people feel that they are willing to take on responsibilities but have limited opportunities for the same. Policy makers could strategize on

providing institutional platforms at multiple levels for youth to get engaged in productive work and thus demonstrate their social skills and sense of commitment, belonging and responsibility. This would help them take greater ownership for the system.

12. Governance is today about access. Young people are increasingly coming to believe that they (and ordinary citizens) have limited access to the state. They also see limited opportunities for participating in the process of decision making at multiple levels. In order to prevent an 'exitism' from public life, the government needs to ensure the accessibility of the instrumentalities of the state, especially for the socially and economically underprivileged.

13. For young people from the newly empowered social groups and the socially and economically disadvantaged sections, the issues of social justice remain high on their agenda. They are increasingly coming to believe that the political/state process is not always sensitive to their just expectations. This has often encouraged a recourse to violence, agitation and the use of force. It may be useful for the state to ensure that voices of these disadvantaged groups are heard and given adequate attention.

14. There is an increased sensitivity in the younger generation to the need for the policy of reservations. The disenchantment is not with the philosophy of reservations but often with its practice. It would be useful for policy makers to develop awareness programmes for all sections of the society on the need for reservations for socially/economically disadvantaged groups and also ensure fairness in the implementation of these policies.

15. The young people in the state are proud of their Kannadiga identity and the same must be cashed in upon by policy makers in the state by helping young people strengthen that identity.

16. With employment opportunities being a major area of anxiety for young people, the state needs to partner with the private sector and expand the pool of employment opportunities. It was this context that the need for life skills programmes for young people across the state was stressed. This would help build a positive self-image and enhance the skill sets of young people.

17. The government has a wide range of welfare programmes. The impact of three such programmes was tapped by the study. It is clear that these programmes are not fully reaching out to the target population it was meant for. This would defeat the very purpose of the programme.

18. Young people in the state are increasingly being convinced that the state government has not designed imaginative programmes targeted at young people. This could also be a result of the fact that the existing programmes of the government have not been publicized among the potential beneficiaries in an imaginative way.

This report provides a snapshot of the aims, aspirations, vision and outlook of the young people in the state. The report has attempted to highlight the areas of convergence and zones of difference. Differences across Socio-Economic Status (SES), gender, place of residence, access to education and caste have all been highlighted. The report provides a 'moment' for a vigorous debate on the 'world' as the youth see it and their vision for a transformed and reformed tomorrow.

University Finances
(A Study of Karnataka State Universities)

Preface

Karnataka Jnana Aayoga (Karnataka Knowledge Commission) was constituted in September 2008 under the Chairmanship of renowned space scientist Dr. K.Kasturirangan, who is also a Member of Planning Commission, Government of India. The mandate of the Commission is to transform Karnataka into a vibrant knowledge society. To accomplish the stated mandate, the Commission identified six focus areas, submitted sixty recommendations and commissioned six research studies.

Eduction plays a key role in transforming a society into a knowledge society. The role of higher education is even more critical as it directly contributes to the progress and sustenance of a knowledge society. The role of universities offering higher education to the mass would have to adapt to the changing needs of the knowledge society. This calls for vertical and horizontal expansion of higher education. As a prelude to this, KJA commissioned a research study called "University Finances: A Study of Karnataka State Universities" to analyse the existing financial resources and to suggest innovative ways of raising funds. The study aimed-

To examine the trends of university financial resources from all sources To analyze the capital and revenue expenditure trends of the universities To compare the financial resources of private and foreign universities

To ascertain the unit cost of education and to make suitable recommendations for proper pricing of the courses

To explore revenue generation through innovative ways

To suggest framework for reporting and performance management for universities and higher education system, and

To make policy recommendations to the Government on financing of general State universities.

Eleven state universities were studied to understand the trend among the universities of Karnataka. Observation of annual reports of universities of US, Australia, UK and New Zealand were made to learn about best financial practices. The report recommends for introducing several new practices and to strengthen the existing. KJA is very pleased to share the findings with the primary stakeholders-universities and state government for taking the recommendations forward.

I thank Prof. M. Jayadev, Associate Professor, Finance and Control Area and Prof. G.Ramesh, Associate Professor, Public Policy Area of Indian Institute of Management, Bangalore for carrying out this research study. I am equally thankful to Prof. Pankaj Chandra, Director, IIM-B and Principal Secretary and all others of Department of Higher Education, GOK, for their kind support and valuable inputs. The Vice Chancellors, Registrars and other authorities deserve our special thanks for having shared not only data but views also. My thanks also goes to all those who responded to us with their opinions.

I also thank all the staff of KJA and in particular Dr. Padmavathi B.S., Senior Research Associate, for having co-ordinated the study.

I hope and wish that this evidence based study of Karnataka Jnana Aayoga would trigger not just debate but remedy for the vexed problem of resource crunch of Universities of our state.

30th August, 2011

Prof. M.K. Sridhar, Ph.D.,
Member Secretary & Executive Director
Karnataka Jnana Aayoga.

University Finances

(A Study of Karnataka State Universities)

EXECUTIVE SUMMARY

In the field of higher education, universities are entrusted with the responsibility of building human assets by inducting knowledge and skills necessary for active and effective participation of the people in the country's development. The conventional state universities are dealing with disciplines such as humanities, basic, and, social sciences and catering to the higher educational requirements of a large population who cannot afford professional and education in private colleges. These state universities are mainly dependent on the state government for financial requirements and having limited avenues to attract alternate resources. To increase access to higher education, the state government has started new colleges and universities enhancing its financial burden as well as the tax payer's. Finances are absolute necessary for any improvement, even to maintain the existing system and inadequate funding affects both quantity and quality of education. In this context, this study assumes importance in analysing financial resources, expenditure pattern, cost and fee structure of state universities, and offers recommendations to both the state government and to universities to improve the overall financial management of state universities. Financial management is not an isolated issue but linked to the quality of education being offered and the governance of universities. Thus our recommendations are addressing financial issues, systems improvement, academic and governance related matters.

Financial Issues

Currently the state government is providing non-plan grant mainly to meet salaries of teaching and non-teaching staff and plan grant for meeting capital expenditure requirements. The allocation of these funds to various universities seems to be very arbitrary and often less than the universities budgetary estimates. Based on revenue generating capacities of universities, we suggest that 60% of the total salaries and allowances of permanent staff may be provided to the three established universities Mysore, Karnatak and Bangalore. The other three universities Gulbarga, Mangalore, and Kuvempu may be sanctioned with 75% of the budgeted pay and allowances and the

remaining universities may be provided full funding regarding non-plan requirements. Alternatively, the state government may shift to direct Student Centric Finance (SCF) against the current practice of faculty- and staff-based funding. Such system built accountability is needed on the part of every department to structure the courses and to attract the students. Regarding plan grants, a matching grant method is suggested for the long-standing six universities and an MOU-based method for funding other universities. In the plan grants, a proper blend of maintenance grants, research and development grants has to be evolved to promote excellence in research. The state government has to introduce performance budgeting or performance funding systems while extending both plan and non-plan grants.

Apart from plan and non-plan grants, the other two important sources of finances for universities are funds from UGC and other central government agencies, and, internal sources in the form of affiliation fees, examination fees, and tuition and other fees paid by the students. UGC has structured multiple schemes to provide and capital and revenue expenditure requirements of state universities. Universities have to be proactive by submitting suitable projects to get funds. Every university should insist that each permanent faculty must work on at least one funded major research or consultancy project in a span of three years.

We recommend that the university finance committee should perform three important functions: partnership, trusteeship and innovation against the current role of just preparation of budgets and other accounting statements. Such active finance committee should explore the resources from industry, alumina and philanthropists to meet the capital expenditure requirements and to establish core fund for providing scholarships.

The current fee structure varies across universities; established universities are charging lower than new universities. We recommend that each university has to announce the "sticker –price" for each course based on all direct and allocated costs. All concessions and discounts may be offered to various categories of students on the basis of "sticker- price". State government should introduce a wide range of scholarships and facilitate for subsidised loans.

To reach the target gross enrollment ratio of 21 percent in higher education by the end of 12th Five year plan, the universities have to increase their

capacities by creating more academic blocks, hostels apart from other quality improvement programs. To meet the huge capital expenditure requirements the state government should constitute a coordination committee of banks/ financial institutions and universities to structure suitable products and mechanisms government can explore the possibility of creating infrastructure for universities s in PPP mode or by leveraging on huge land resources of universities. Where the student may pay fees/rent to the project company.

To meet the challenges of higher education-access, quality, and inclusive education the state government has to gradually move towards 20 percent of education budget to university and higher education against the current practice of 12 percent. This enhancement is needed to provide subsidized educational loans and to introduce a wide range of scholarships to meet the educational requirements of various categories of students.

Systems, Academic and Governance Related Issues:

In the federated affiliation university structure, the main task of the university is conducting examinations and awarding degrees. Restructuring of the current undergraduate examination system is warranted to reduce the burden of organizing and managing the undergraduate examinations on the universities. We recommend a separate state-level board for this purpose. State government has to form a team of software professionals to explore the possibilities of using ICT solutions for management of examinations to reduce the costs.

The state government should organize a performance audit of investments in higher educational projects for the last ten years to evaluate the running university benefits, economic benefits, social benefits, and environment benefits.

State government should improve the current accounting and disclosure practices of universities by introducing accrual accounting system, where each university has to disclose financial position by preparing balance sheet and net surplus in Income statement. Reforms in accounting and information disclosure systems are pre-requisite for exploring alternate funding sources.

Currently universities are offering a wide range of courses where in some courses the students are below the optimum number. Each university can focus on select number of courses and consolidate its resources.

Many universities have shortage of faculty up to 50 percent of sanctione posts. Infusion of new blood is needed and fresh recruitment of facult should be taken up on priority basis rather than to simply meet the criteri of social justice and roster system. The new faculty should be selected b strictly following the UGC guidelines.

Universities can offer distance education programmes in collaboration wit KSOU and IGNOU. This conserves the faculty and physical resources and also facilitates standardization across the course content and evaluation. State universities may market these courses by lending faculty and physica resources. A revenue-sharing model through which state universities will ge funds for marketing and providing services may be developed.

Universities should intensify their efforts to control costs and increase institutional productivity by sharing faculty resources, substituting technology applications and productive use of physical resources.

Each department has to be treated as a responsibility center (RC). The head of RC is responsible for generating projects and funds, enrolment, fees, expenditure, overall performance of the unit, etc. The universities should evolve a system of performance evaluation of the faculty on various criteria such as teaching, research, consultancy and academic administration, and such performance indicators should be disclosed at appropriate intranet portals. Academic performance index should be introduced. University faculty should be given incentives for obtaining funded projects either for research or consultancy. Universities should introduce performance-based budgeting. In the current system of budgeting, there is low accountability for success or failure or meeting financial targets.

The state government should insist on NAAC accreditation, review the ratings, and efforts made by the university to improve the ratings. The ratings are to be considered while sanctioning grants.

Selection and appointment of VC forms a crucial part of the reforms of university management. VCs provide the academic vision to the university and they should be professionally respected in the academic circle. We observe that the experience has not been uniform. Government should establish a process of appointment of VC purely on merit basis. State government in consultation with VC should constitute the syndicate by selecting people from the academia, industry and other people who can provide a proper vision and

perspective to higher education. We understand that public representations should be present in the syndicate.

The state government may review the decision of forming new universities for specialized fields such as Sanskrit, music, folk arts, etc. These disciplines may be offered in existing universities by encouraging students to pursue these courses and adequate financial support may be provided to interested students.

Pre-Service Elementary Teacher Education in Karnataka: A Status Study

Preface

Karnataka Jnana Aayoga (Karnataka Knowledge Commission) was constituted in September 2008 under the Chairmanship of renowned space scientist Dr. K.Kasturirangan, who is also a Member of Planning Commission, Government of India. The mandate of the Commission is to transform Karnataka into a vibrant knowledge society. To accomplish the stated mandate, the Commission identified six focus areas, submitted sixty recommendations and commissioned six research studies.

The report presented here Pre-Service Elementary Teacher Education in Karnataka: A Status Study is the culmination of series of discussions held within the Working Group on Literacy and School Education (WGLSE) on reforming pre-service and in-service teacher education in the state. Taking this forward, KJA submitted the recommendation to the Government, in August 2009, for consideration. Sequel to the submission, several rounds of meetings were held with the Department of Primary and Secondary Education, Government of Karnataka to draw implementation mechanism. On the suggestion of the Department of Primary and Secondary Education, a research study to find out the status of D.Ed. colleges in the state was commissioned with the following terms of reference-

To document the infrastructure of D.Ed. colleges in Karnataka in terms of physical resources; academic resources and human resources

To ascertain the level of understanding of teacher educators in terms of their subject knowledge in mathematics, general sciences, social sciences and languages; pedagogic knowledge vis-à-vis nail-kali and NCF-2005; and clarity of goals with respect to knowledge, skills and disposition that are to be imparted to students

To capture classroom practices of teacher educators' in terms of their planning; structure of delivery of lessons; interaction with students and use of assessment techniques.

To understand the status of D.Ed. colleges in the state, a stratified random sampling technique was used. The sample comprised of 108 D.Ed. colleges, 600 teacher educators and 983 teacher trainees. Proportional representation

of government, aided and unaided colleges was also ensured to make it representative. The report presents several recommendations to strengthen pre-service elementary education system of the state. KJA is pleased to present the findings and recommendations for consideration of the concerned stakeholders.

I thank Dr. Mythili. R., Director of R.V. Educational Consortium and management of Rashtreeya Sikshana Samithi Trust for carrying out this research study. I am thankful to Secretary and all other officers of the Department of Primary and Secondary Education, GoK, and DSERT for their kind support and valuable inputs. My thanks also goes to the Principals, teacher educators and the teacher trainees who shared their views and opinions. The services of the staff of KJA are fondly remembered.

I hope the findings of the report would act as inputs to policies aimed at enhancing the quality of teacher education in the state.

30th August, 2011

Prof. M.K. Sridhar, Ph.D.,
Member Secretary & Executive Director
Karnataka Jnana Aayoga
Government of Karnataka.

Pre-Service Elementary Teacher Education in Karnataka: A Status Study

EXECUTIVE SUMMARY

Research focusing exclusively in the area of pre-service elementary education is very sparse. Even such research as there are, have not contributed towards formation of policies or even planning in the sector. In this context, the Karnataka Knowledge Commission entrusted RV Educational Consortium with the task of conducting an In-depth study of status of D.Ed colleges across Karnataka.

The objectives of the present study are:

1. To document the infrastructure of D.Ed colleges in Karnataka in terms of-
   - 1.1 Physical resources
   - 1.2 Academic resources
   - 1.3 Human resources
2. To ascertain the level of understanding of teacher educators in terms of their-
   - 2.1 Subject knowledge in Mathematics, Science & Social Science
   - 2.2 Pedagogical knowledge vis-à-vis Nali Kali, & NCF, 2005
   - 2.3 Clarity of goals with respect to knowledge, skills & dispositions that they have to impart to their students
3. To capture classroom practices in terms of teacher educators'-
   - 3.1 Planning
   - 3.2 Structure of delivery
   - 3.3 In teraction with students
   - 3.4 Use of assessment techniques

Being conceived primarily to analyse the prevailing situation of D.Ed colleges in Karnataka, a participative survey method was adopted. D.Ed Colleges from

the four educational divisions were selected, based on the proportion of colleges in each division. A stratified random sampling technique was used to ensure proportional representation of Government, Aided and Unaided colleges. The sample comprised of 108 D.Ed colleges, 600 teacher educators and 983 students teachers. The study used both quantitative and qualitative data which were captured through a set of seven data forms.

The study's major findings are:

- 20 colleges among the sample chosen had closed down
- Colleges studied have adequate infrastructure
- 65% of student teachers enrolled are girls
- A majority of student teachers (41.7%) in the D.Ed colleges belong to the 'OBC' category. Next come student teachers from Scheduled Caste forming 26.4% of the sample
- Overwhelming 71.4% of student teachers come from families whose combined annual income is between Rs.6,000-Rs.12,000/-
- 78% of student teachers are from arts stream
- A majority of teacher educators (63.5%) are male
- The average age of all the teacher educators is 37.4 years
- Very few teacher educators (15%) have experience of teaching in primary schools
- Teacher educators in our sample have attended an average of 2.5 training programmes in their entire career
- Teacher educators performed rather poorly in an assessment to gauge their readiness for implementing reforms in school education mooted by NCF, 2005
- Physical environment of all the classrooms in D.Ed colleges were conducive for lecturing
- In all 147 D.Ed classrooms observed, lectures were predominant
- All student teachers complained about excessive written work
- Teacher educators find the curriculum to be too heavy for two years

- Many teacher educators complained of shortage of time for content enrichment

Based on the findings the study presents the following suggestions:

1. Curriculum

The curriculum document being used presently for the D.Ed course, prepared by DSERT in 2002 is fairly comprehensive. In the light of NCF, 2005 however, it has to be revamped. The NCFTE (NCTE, 2009) recommends that the duration of pre-service teacher education programme should be four or five years, after completion of 10+2 level of school education. As an interim model, the document suggests redesigning D.Ed course in terms of curricular areas and transaction processes.

2. Resources

Colleges are not using the available resources efficiently. Computers and Internet are almost lying idle. The environment surrounding most colleges, both urban and rural offer wonderful spaces for explorations and experiences. While the nature of these experiences may vary depending on where the college is situated, more of the colleges do not even view them as potential resources.

While it is mandatory for students to create 'TLMs' during their teaching practice, they are mostly unimaginative and always treated as add-ons. Colleges are simply not investing time and efforts in planning and developing academic resources. Student created TLMs are displayed only for the sake of impressing the co-ordination board. Another potential resource that is being under utilised are human resources in the form of talented persons both in the vicinity of the college and within the college. In the course of our short interaction with students we found quite a few who were well versed in drawing/craft/music/theatre/folk art etc. Instead of complaining about lack of part-time lecturers to provide experiences in these skills, colleges can find means of utilising available talent.

The Department can initiate the following to ensure better use and management of resources:

- Orient D.Ed College Principals to optimise use of available resources
- Bring out a hand-book of ideas for tapping into community resources
- Integrate the "Part-B" subjects so as to give holistic experiences to students making use of talent from within the students, teachers or local community
- Making it mandatory for colleges to establish teaching learning centres as mooted by NCFTE, 2009. The document suggests ways and means of making these centres vibrant spaces of learning for student teachers, teacher educators as well as school teachers

3. Capacity building of teacher educators

The NCFTE, 2009 points out that quality of teacher educators is the major stumbling block in implementing effective pre-service teacher education programmes. While the issue is complex and calls for considerable planning and wide ranging consultations especially in the light of the mismatch between the lecturers' entry level qualification and on-the-job expectations, a few suggestions that emerged from this study are:

- Arranging for video demos on NaliKali, Chaitanya method and multigrade teaching
- Providing forums at block and cluster levels for communication among BRPs/CRPs and teacher educators
- Orienting teacher educators to utilise assignments as a meaningful learning experience for students
- Conducting periodic need-based training by DIETs for the faculty of all colleges falling under their jurisdiction
- Orienting teacher educators to new developments in school education through tele mode
- Breaking the isolation among teacher educators by encouraging formation of academic networks
- Providing incentives and opportunities for continuous professional development by offering relevant, short-term certificate courses through Distance Learning, apart from the regular university courses on offer

- Providing ample opportunities for academic growth including sabbatical for study and research; faculty exchange programmes and fellowships; professional forums; along with short and long term courses. At present such opportunities are unavailable for teacher educators of colleges other than DIETs
- Initiating self appraisals and link these to recognition and incentives
- Making it mandatory for teacher educators to attend in-service programmes, after ensuring such programmes are need based and relevant
- Assessing teacher educators' knowledge base, skill set and dispositions once in five years. These assessments can form the basis for planning specific enrichment/capacity building programmes. Promotions and other incentives can also be linked to teacher educators' participation in these programmes
- Putting in place mechanisms to evaluate all in-service programmes for teacher educators to ensure they are meaningful and useful. Apart from participants' feedback, such evaluation could include student teachers' feedback and where possible classroom observations
- Encouraging and promoting actively the formation of academic networks of teacher educators. Such bodies would go a long way in infusing professionalism among its members

The aforementioned suggestions are interim in nature. For a longer term, creation of a separate cadre of teacher educators is essential, as recommended by NCFTE.

4. Classroom Practices

Classroom practices followed at present in D.Ed colleges, as observed in this study reflect very poorly on the attempts at school reforms. The D.Ed classes come across as didactic, uninspiring and rooted in conventions. Such classroom practices would not bring any change in student teachers' pedagogical beliefs and practices. Once they become teachers, they would continue to teach the way they have learnt and if under pressure to adapt newer ways, would do so without convictions.

The NCERT report on the comprehensive evaluations of centrally sponsored scheme on restructuring and reorganisation of teacher education laments that "a cycle of reproduction of poor quality has set in" (NCERT, 2009).

To break this cycle the following measures need to be taken on an urgent basis:

- Implementing a constructivist model of learning to teach wherein students' pre-existing notions are to be taken as the starting points for engaging student teachers within a broader vision of school reforms
- Making experiences of student teachers in the course of practice teaching/ Internship as well as their own experiences as students/ observing other children at home, play, etc. and reflections on these experiences central to classroom teaching
- Using classrooms as spaces for initiating dialogues and discussions, drawing upon the student teachers' experiences/ideas/beliefs, that they bring in as adult learners
- Encouraging group and collaborative learning
- Orienting teacher educators to adopt an integrated, problem-solving approach towards teaching their students
- Doing away with prescribed textbooks. There already exists in the state a rich literature pertaining to elementary education through various programmes launched by the Government and NGOs. These need to be collated, gaps identified and then initiate a process of creating literature in Kannada to augment the existing ones and to fill in the gaps. If the culture of excessive dependence on prescribed textbooks is to be overcome in schools, it should necessarily happen at the D.Ed level
- Teacher educators have to be helped through orientation and initial hand holding to use narratives based on research and documentation, project reports, case studies etc. Plenty of such narratives have already been generated in the state since DPEP days and many are available in Kannada. These have to be harnessed to give a practical, education-related perspective to the foundational theories drawn from cognate disciplines

- As the NCF, 2005 points out *it is assumed that teachers can easily set aside their own biases, beliefs and assumptions*. Time and again research has belied this assumption. As adult learners, student teachers therefore need to be provided spaces for reflections on their own experiences and assumptions.
- If dialogues and reflective teaching is to be the norm in D.Ed classrooms, such practices have to be modeled for teacher educators. Time and effort needed for such a change in perspective have to be invested

5. Practice teaching / Internship

As gleaned from teacher educators and student teachers, very little meaningful learning seems to accrue through internship. This period can be a potential opportunity for helping student teachers develop robust, personal theories of teaching/learning, which they would refine over the years as they gain more experience as a practicing teacher. For either teaching practice or internship, the duration of experience is not as important as the quality of coaching/mentoring by teacher educators and school teachers. The two should become true partners in the training process, supporting student teachers collaboratively. The following steps can ensure making internship/ practice teaching more meaningful:

- Actively promoting sharing of learning that happens during internship
- Practice teaching can be recast as field based projects rather than making student teachers write mechanical, outmoded lesson plans of isolated lessons
- Holding group discussion on myriad problems faced during practice teaching internship, including administration related and coming up with probable solutions. School functionaries including BRPs/CRPs can be included where possible in these discussions
- Promoting greater synergy among D.Ed college faculty and school teachers by making it mandatory for a meeting before, during and after practice teaching/internship
- Orienting school Principals and teachers towards the importance of their role as mentors to student teachers
- Involving BRPs/CRPs for academic monitoring and feedback

- Ensuring co-ordination among the Departments of Primary Education, DSERT and DIETs
- Breaking away from the mould of conventional "Herbartian" based lesson plans and giving more flexibility to students to plan and implement constructivist teaching models
- Insisting on colleges to take initiatives as part of alumni associations to help newly appointed teachers to make the transition so as to make this crucial integration phase more conducive to developing professionally

6. Assessments and Evaluation

The present study did not address this issue directly but it was obvious during our observation of classrooms and interaction with student teachers and teacher educators that they are geared entirely towards examinations. The results of these examinations not only determine individual student teachers' career opportunities but are also used as a measure of a college's quality.

One way to break this undue importance attached to results would be to evolve indicators to measure colleges' quality. Frameworks for such assessments already exist, such as the quality indicators for Pre-Service Teacher Education evolved jointly by Common Wealth of Learning and NAAC.

Alongside this, the assessments of students have to be completely overhauled, at the time of curriculum revision including various techniques of formative assessment.

Internal assessment is already an inherent part of the present course. This should continue by incorporating multiple robust scoring rubrics to avoid subjectivity.

7. Research and Advocacy

Pre-Service teacher education at elementary level suffers from poor visibility and remains isolated from both school and higher education.

The sector has to be brought into the forefront of educational discourses on quality. The Department should initiate steps to make D.Ed programme more visible. Multi-pronged consultations are to be initiated with personnel

involved in schools, D.Ed colleges, PU colleges and Universities/RIE/DIET/Other organisations.

Research in education in general and this sector particularly, has long remained a neglected area. Research in this sector has to be promoted both to inform policy as well as assess level of implementation of new programmes.

A research and development centre has to be established within DSERT exclusively dealing with teacher education. This should include both pre-service and in-service components. This centre has to establish strong linkages with all stakeholders in the field to help generate robust practice-based theories in the sector, along with documenting and culling out learning from effective/innovative practices.

At the policy level, the Government needs to take the following steps, as have been recommended by various commissions and committees reviewed in section

- Formulating a State Level Policy of continuous teacher professional development
- Putting in place a management information system on teacher education
- Developing separate cadre of teacher educators at the elementary level
- Encouraging flexibility in D.Ed course, within given State formulated frameworks and close monitoring systems
- Promoting Diploma/Certificate courses through teacher education institutions
- Considering a four year integrated elementary education programme as promulgated by NCFTE, 2009
- Monitoring and regulating D.Ed colleges with a view to ensuring quality
- Strengthening existing colleges that are providing quality pre-service education

Pre-Service Teacher Education is a first, albeit crucial stage in the professional development of a teacher. The sector has to shape itself as a torch bearer in this continuum. For that to happen, the low importance given to this sector has to change.

A Study on Gross Enrolment Ratio in Higher Education in Karnataka

Preface

Karnataka Jnana Aayoga (Karnataka Knowledge Commission) was constituted in September 2008 under the Chairmanship of renowned space scientist Dr. K.Kasturirangan, who is also a Member of Planning Commission, Government of India. The mandate of the Commission is to transform Karnataka into a vibrant knowledge society. To accomplish the stated mandate, the Commission identified six focus areas, submitted sixty recommendations and commissioned six research studies.

Education has always played a key role in moulding an individual and a society. This has become even more evident with the transition of nations from capital intense economies to knowledge based societies. It is also felt that the challenges of 21st century knowledge society can only be effectively addressed by those nations whose education system is vibrant. In case of a contry like India and a state like Karnataka, the challenges are diverse and enoroumous. The challenge before the country and the state is to achieve horizontal and verticale growth of education sector within a stipulated timeframe. Recognising the challenges, the National Knowledge Commission recommended for establishing nes universities across the country and slo to introcude measures to enhance quality education. On the similar lines, KJA submitted a recommendation to increase gross enrolment ration at the higher education level. To make an intervention in this regard, an in-house study titled Gross Enrolment Ratio in Higher Education was undertaken with the following objectives-

To arrive at the current overall Gross Enrolment Ratio in Karnataka To ascertain the status of GER of various universities of Karnataka To explore the reasons for the current GER in select few districts

To make recommendations to improve the Gross Enrolment Ratio in the state.

The study has calculated the current GER, based on the enrolment data received from the state- owned, private and deemed Universities in the State for the academic year 2009-10. To find out the reasons for low GER, a questionnaire was designed and 1200 respondents were interviewed spread across four districts, representing low, high and average literacy. Besides presenting the over-all GER for the State, the study reveals the university-wise, course-wise and gender-wise enrolment to enable appropriate policy intervention. The findings of the survey of the drop-outs can act as a significant input to increase the GER in the State in the coming years.

I thank Dr. Manasa Nagabhushanam, CEO and Lead Researcher of AnalyZ Research Solutions, for having served as the Consultant for this study. I also thank the Principal Secretary and other officers of the Department of Higher Education, Director of PU Board, Director of Collegiate Education, Director of Technical Education, Director of Census Board and Planning Department of Government of Karnataka for kind support. I also express my gratitude to all the Vice-Chancellors and Registrars of various Universities of Karnataka. The study would not have been possible but for their kind cooperation in sharing data.

I also thank the staff of KJA for their support and in particular Dr. Padmavathi B.S., Senior Research Associate, for having coordinated the study.

30th August, 2011

Prof. M.K. Sridhar, Ph.D.,
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Government of Karnataka.

A Study on Gross Enrolment Ratio in Higher Education in Karnataka

EXECUTIVE SUMMARY

The Research Study has the primary objective of computing the Gross Enrolment Ratio and further to ascertain the status of GER of various university jurisdiction districts of Karnataka. It also aims at exploring the reasons for the current GER and to make recommendations on strategies to improve the Gross Enrolment Ratio in the state.

To compute the GER for the state and for the various Universities, Data Collection Formats were developed and administered to all the state universities, private universities, institutes of national importance and the directorates of higher education. Questionnaire was developed to collect data from respondents of four districts to find the reasons for the current GER. The districts were selected on the basis of literacy rates.

The data collection formats comprised of enrolment data course wise for undergraduate, post graduate and Ph.D. programs. Enrolment data disaggregation in the formats was done district wise and on the basis of Gender, geographical location and Social Class.

The completion of data collection phase revealed irregularities in the maintenance of data by the Universities and hence gender-wise and course-wise enrolment could be captured in this study.

Both GER and EER were computed from the enrolment data. GER is an index which measures the enrolment in higher education over the population in the age group of 18 – 23. Hence population in the age group of 18-23 was projected. The EER is an index which measures the enrolment in higher education over the eligible population which constitutes the pass outs at the +2 or higher secondary level, the eligible population was summated by taking the pass outs at the +2 level from state pre-university board for the years 2006-2010.

On analyzing the data it was found that the state GER is 12.22% and the state EER is 56.7%.

The state Male GER and EER is higher than the state Female GER and EER. Further, computing the GER and EER of various state Universities in

Karnataka, it was found that Bangalore University has the highest GER of 13.88 which is above the state GER and EER of 77.05%. The least GER and EER are of Davanagere University. It was also found that the GER of specialized universities is less than 1% and EER less than 5%. The analysis of course wise enrolments revealed that Arts stream has the higher enrolment across the state for both Under-graduation and post-graduation. Science stream has higher enrolment across the state for post-graduation, whereas commerce has higher enrolment for under-graduation.

The analysis of primary data to explore reasons for discontinuation or not pursuing higher education revealed that financial problems at home as the primary cause. The second critical reason was that there was lack of guidance about the courses, college and the importance of higher education. The third reason for discontinuation was marriage and it was the primary reason amongst the female gender. The next reason was found to be personal and family pressures.

Majority of the respondents suggested provision of some sort of financial support to pursue higher education. This calls for devising measures to reduce the financial constraint of the eligible population. A significant suggestion was to provide guidance and encouragement for higher studies which requires creation of awareness and counseling and guiding students on available options in terms of colleges and courses. Enhancing the girls marriageable age was also suggested by a considerable number of respondents.

The study recommends the State Government to take up both immediate and long term measures to increase the enrolment in Higher education and tackle the various issues and deterrents raised and discussed in this report. The study also recommends not to increase colleges but increase enrolments with the current system of education. The study also recommends restructuring and overhauling the courses like BA. B. Sc and B.com so that students find value in getting into higher education. Another recommendation is about finding out ways and means to provide financial assistance to students and to create awareness and provide guidance to students regarding the courses and colleges and motivate enrolment to higher education.

Developing a Model for Samudaya Jnana Kendras (Community Knowledge Centres)

Preface

Karnataka Jnana Aayoga (Karnataka Knowledge Commission) was constituted in September 2008 under the Chairmanship of renowned space scientist Dr. K.Kasturirangan, who is also a Member of Planning Commission, Government of India. The mandate of the Commission is to transform Karnataka into a vibrant knowledge society. To accomplish the stated mandate, the Commission identified six focus areas, submitted sixty recommendations and commissioned six research studies.

Development of a knowledge society largely depends on the ability of its people to create, disseminate and apply knowledge to all aspects of human endeavour. Therefore, enabling people to participate and engage in the knowledge processes is of great importance. This understanding prompted us to undertake a study to learn about the existing information dissemination centres and also to explore innovative ways of facilitating knowledge requirements of people. The study aimed at evolving a model community knowledge centre (Samudhya Jnana Kendra)-

To asses information and knowledge needs of the community at gross root level To study existing institutional framework within government system catering to information and knowledge needs of the community and its effectiveness

To capture experiences of various government and voluntary organizations in providing information and knowledge services at gross root level

To explore similar models functioning across the nation and to build case studies

To suggest application of technology to maximize utility

To suggest appropriate policy intervention and provide support structure and facilitation to build SJKs

To evolve a roadmap to build SJKs in Karnataka.

The study first presents an analysis of existing information, learning and knowledge (ILK) needs and processes in communities on the basis of primary research study. Then it goes on to review the role of governments in this area, followed by an assessment of some new convergent delivery models from across the country. On the basis of these findings, the report attempts to develop an institutional model for the Samudaya Jnana Kendras in Karnataka.

I thank Mr. Parminder Jeet Singh, Executive Director of IT for Change and hi team for carrying out this research study for KJA. I am thankful to Principa Secretary and other officers of the Department of Higher Education, GOK fo their kind support. My thanks also goes to the stakeholders who willingl participated in our study.

My special thanks to staff and research associates of the KJA for their support.

20th September, 2011

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Developing a Model for Samudaya Jnana Kendras (Community Knowledge Centres)

EXECUTIVE SUMMARY

Background

For Karnataka to be a real knowledge society, it is important to go beyond looking at the opportunities which are emerging in the formal economy and formal education sectors; to understand and examine the transformative knowledge possibilities which have opened up vis-a-vis the daily lives of people and communities. The concept of *Samudaya Jnana Kendra* was conceived with this end in mind. This *Kendra* is supposed to conceptually epitomize and physically represent the idea of 'knowledge for everyone' in the lived community context, by recognizing and invigorating those informal processes and institutions which have a great impact on the knowledge culture of people and communities. Knowledge, as we know, has always been a prime factor of development and positive change in societies. In this report, as we recognize that information, learning and knowledge (ILK) are closely related concepts that can be placed in a continuum, we use the composite term ILK.

This report is an attempt to look at what kind of community institution(s) can help address the ILK needs of communities, in the current context of an emerging knowledge society. It first presents an analysis of existing ILK needs and processes in communities on the basis of a primary research study. Then it goes on to review the role of governments in this area, followed by an assessment of some new convergent delivery models from across the country. On the basis of these findings, the report attempts to develop an institutional model for the *Samudaya Jnana Kendras.*

Assessing community ILK needs

Any knowledge intervention can be successful only when it facilitates community level ILK processes in a holistic manner. This requires an effective mapping of ILK processes on the ground, which has to be as much informed by collective needs and social values and norms, as by immediate individual interests. Recognizing this, we developed a community level ILK assessment framework, with the following components: nature of articulations of ILK needs, the state of existing ILK infrastructure in the community, level of

individual and institutional ILK skills in the community and the impact of mass media on community level ILK processes. Using this framework, we conducted a participatory ILK assessment study in the districts of Mandya and Koppal. The field work in these areas was respectively facilitated by *Samuha* and *Vikasana*, which are NGOs with considerable and long-standing community presence.

We adopted a participatory research design which primarily relied on the methodology of Focus Group Discussions with various groups in the communities. We also elicited ideas from the research participants on their thoughts around various aspects of designing a model for the SJKs. We also conducted key informant interviews with people who were identified as possessing the expertise to provide special insights in the area of study. Two consultations, one each at Koppal and Mysore, involving development workers, community leaders and articulate community members, were also conducted.

Our main findings from the participatory research study, the key informant interviews and consultations are highlighted below:

- The most common expressed information needs related to immediate gratification – for instance, information connected to livelihoods, educational opportunities and public service entitlements. This is only to be expected. It is rather unlikely that a community whose ILK needs at this level are not being addressed, will articulate higher level non-instrumental ILK needs. This cannot be taken to mean that the community does not have such higher level ILK needs. The situation is somewhat similar to how, in post-independence decades, it was difficult to convince most marginalised communities about the necessity of schooling their children , since they felt that it will be of no use to them, in their given material and social context. In our field interactions, we found that more marginalised a group was, the less eager it was to talk about ILK needs, which may appear paradoxical as these groups obviously have great need for ILK. This shows that the articulation of ILK needs is strongly tied to one's current contextual location, and recognition of concrete possibilities.

- Significantly, when presented with the possibility of a community ILK

centre , most people we interacted with were able to articulate a strong need for both (1) a very broad set of ILK activities in the community, including knowledge needs, aspirational life skills, dialogic engagement with traditional knowledge, ILK needs related to strengthening local democracy and community building, maintaining good libraries, robust community media, ICT-enablement etc., and (2) ILK services to be provided, or at least facilitated, by public agencies, treating them as public goods. These twin findings are very important for laying out the context of a possible new public intervention in the area of community ILK needs.

- Most people we interacted with had strong reservations about existing institutional efforts for addressing ILK needs. They felt that the public servants involved had a very top-down attitude, and carried out a standardized ILK delivery without taking note of the particular context. These kinds of ILK processes were simply not suited to adult ILK interactions, apart from being of little substantive value. There was also a feeling that strong vested interests get developed around public service delivery which cause deliberate withholding of information, and its use for illegitimate personal and political benefit.
- At the consultations, when this aspect was probed in greater detail, we found an almost unanimous view that for ILK activities to be effective and free from the manipulations of vested interests, they must be separated from the service delivery parts of government machinery as well as from local politics. There was a strong accent on context- specific flexibility and a strong community management role, as key factors in the success of any ILK intervention. Perhaps, the single most important issue that was repeatedly asserted as key to a successful ILK intervention was that the community level facilitator of any ILK centre *must* posses certain personal qualities, which enable committed but humble facilitation. Any proposed centre has to be a welcoming public space, not only open to all, but which also pro-actively enables equality of participation.

These distinct imperatives and principles that should inform the design of any new initiative in the area of community ILK emerging from our interactions with community members and development workers were re-affirmed by our case studies of some large-scale existing ILK interventions of the State as well

as some new age ICT enabled community information and service centres. These case studies and the insights therefrom are detailed in Sections 1b and 1c respectively, of the report.

A brief review of governmental ILK interventions:

We studied three large scale existing ILK interventions of the State, in Karnataka : the agricultural extension system, the adult education programme and rural public libraries. These are interventions with a wide scope and long history, and our examination of them was by no means exhaustive. It was tuned to the objective at hand, of identifying learnings which could help us in devising strategies to address community's informal ILK needs, in the new context of a knowledge society.

The agricultural extension system is by far the most intensively invested in, among the State's ILK interventions. It has numerous facets involving multiple agencies, and there have been a few system overhauls as well, since this ILK area has been perceived as really important. Because of such investments and attention, there is not really any dearth of agriculture related information in the system. However, both our primary field studies and review of secondary literature reveal that very few farmers access or depend on the state's extension system for information related to agriculture and allied activities. How can this be explained? To begin with, ILK delivery is a very specialized process, quite different from service delivery. It is not just a matter of having the required information. It needs adequate attention to demand-side processes, chiefly the processes at the interface of the community with the extension system. A closer examination reveals that insufficient attention to these processes at the last mile is at the root of the failure of our current agricultural extension systems. Instead of focusing on specialization in ILK delivery, the agricultural extension system seems to be moving in the opposite direction, of further converging it with service delivery , There has been a gradual but clear shift from an ILK focus, making ILK functions secondary to service delivery functions which appear more immediately gratifying and measurable.

In terms of insights from the case of the agricultural extension system for a new approach which can comprehensively address a broad range of ILK needs of the community, it is fairly evident that the supply side processes are

not the main aspect to work on. The supply side focus has to abate in favor of a new approach stressing the demand side, or the community-end dynamics. This requires examining strategies for specializing and developing core competencies in the area of ILK delivery functions. This requires their separation from service delivery functions, and cultivation of a participatory knowledge culture at the community level, that can appropriately be fed into by experts.

A brief study of the Adult Education Programme in Karnataka confirmed the lack of a participatory knowledge culture, and the failure to locate ILK activities in the community's felt needs, as the key problem areas. The Programme focuses on the instrumental element of basic literacy, despite the widely acknowledged fact that neo-literates relapse very frequently in the absence of the rootedness and immersion of literacy programmes within the larger ILK context of the community. Whether literacy triggers wider ILK engagements or whether ILK activities situated in people's felt needs and context build the hunger for sustaining literacy is an interesting exploration. However, the Adult Education Programme, seems to be moving towards reducing its community presence, and focusing on instrumental, and more easily measurable, goals. The insights for building a new comprehensive ILK approach from a review of the Adult Education Programme is similar to the learnings from the review of the agricultural extension system. Further, adult education needs to be recognized as a broad, self-motivated and self-driven engagement with community based ILK processes and activities. It is only through strengthening the latter that individual-oriented goals and number-driven targets of literacy and adult education can be improved. We also briefly examined the *Mahila Samkhaya* programme of the Government of India which is guided by the motto ' education for empowerment'. This programme helps marginalized women organise themselves in knowledge-activity oriented self help groups. While acknowledging literacy to be an important area of work, the programme focuses on building a larger engagement with knowledge and community processes which helps us envision an alternate strategy for adult education.

The rural public library system in Karnataka is quite extensive. There are over 5000 *Gram Panchayat* libraries in Karnataka, making it a state with one of the largest rural library networks. However the dynamism and responsiveness of

these libraries to community level ILK needs to be re-examined. Field interviews and research reveal a gradual loss of any book culture, that may have existed, to the pull of audio-visual media. Many people we spoke to, including community members, seemed to suggest that very few people in villages read books, even if literate. Our field study as well as secondary literature reviews indicate that the books available at the village library may often not be very relevant to user needs and preferences. In many cases, the book lending system itself is not functional, mainly from a fear that books may not be returned, which indicates the lack of community engagement and local social capital. Our field visits also found that the dynamism, or even the bare functioning, of the village library largely depended on the dynamism of the library supervisor. This once again affirms the centrality of community-end processes, and the need to focus on getting them right.

Clearly, the village library has no relationship with the local ILK ecology and processes. Instead, it functions as a standalone institution; a mere repository of books and some other reading material. One is surprised by the lack of institutional linkages of village libraries to other large-scale ILK interventions such as the agriculture extension system and the adult education programme. Especially, in the case of the Adult Education Programme , the Continuing Education Centres were supposed to house a library, but no attempt was made to link them with the existing libraries. A comprehensive community level ILK initiative will require an across-departments, institutional (and not ad-hoc) convergence, that can link to, and service, all departments' ILK mandates.

While the State's performance in its development role has a mixed report card across the country; in the ILK space, even the concerned departments and senior officials seem to accept that the current strategies are simply not working. Hence, there is an urgent imperative to look at new approaches. This time, the focus should be on convergence of specialized across-the-sectors information delivery functions, with stress on developing appropriate community-end processes, with close involvement of the community. Fortunately, ICTs provide just such a convergence opportunity, with possibilities of community-end ownership and flexibilities. Some experiments are being done across the country for developing community level convergences, and we have examined four of them for the present study.

ICTs for community level convergence – Lessons from across the country

The countrywide Government of India programme of Common Service Centres (*Nemmadi* Centres in Karnataka) is a bold and ambitious initiative for setting up 1,00,000 centres, one each for 6 villages. These centres are supposed to deliver public services as well as commercial services of various kinds. The centres are mostly owned by corporate groups and run by village entrepreneurs. We will not go into an in-depth discussion of this interesting initiative, because ILK functions are clearly not a priority here (except for a very few easily monetisable ones, like providing examination results). There is certainly a move towards converged service delivery to the community. However, such a convergence, especially if owned and managed by corporate players and completely based on business models, does not serve the purposes of community ILK needs. Unfortunately, expansive and unsubstantiated claims of those in charge of these programmes of being able to deliver practically everything through these centres, have blocked specialized ILK convergent initiatives. Our field assessment of Common Service Centres reveals that they are not suited to take up most required ILK functions, and it is important to have a separate ICT enabled convergence of just community ILK functions.

The *Akshaya* programme of the Government of Kerala is a Common Service Centre-like scheme, but here the main player is a public agency, the Kerala State IT Mission, and not corporates. Also, unlike the Common Service Centres in other states, *Akshaya* centres, though run by village entrepreneurs, have a close relationship with *gram panchayats.* Such close involvement of public agencies has enabled *Akshaya* centres to fulfill some ILK functions. Even when these functions are not monetisable, the centre operator feels obliged to facilitate them because his/her centre is organically linked to, and in many ways dependent on, these public agencies. However, the focus remains on service delivery, and even this arrangement does not seem adequate to comprehensively, and in a sustained manner, address community ILK needs.

The Village Knowledge Centres of M.S. Swaminathan Research Foundation (MSSRF) in Puducherry are a good example of community owned ILK centres. The agenda and work plan of the centres is set locally, by a Managing Committee consisting of community members. The community also

contributes funds for running the centres, apart from providing rent-free space and community volunteers. However, an absence of integration of the initiative with government systems means that these centres are not able to facilitate key areas of government ILK roles and functions. This leads both to sub-optimal use of these centres and ineffectiveness of these otherwise well-resourced ILK initiative. The MSSRF Centres also focus largely on apolitical information and training without taking an active role in the local governance processes. While this may have helped the centres stay above village politics and thus ensured continued support from all sections of the community, non-involvement in political work such as facilitating right to information, help in organising social audits, supporting *gram sabhas*, facilitating community-generated information etc., may reduce their relevance to the community, and access to the community's voluntary energy that could otherwise be mustered remains unutilised.

The *Suvidha Kendras* of the Mission Convergence initiative of Delhi government started as an scheme to provide information about public services to women in marginalised communities. They have now expanded to servicing the entire community, and have also taken up functions such as identifying vulnerable households in the community. What is most interesting about this initiative is its innovative networked governance model. At the apex is Mission Convergence as a specialized agency of the state government. The *Kendras* are run by NGOs, which in turn are supervised by mother NGOs, as well as specialized Mission Convergence's district level bodies. This model ensures that the accountability that is associated with governments is obtained even while taking the benefit of NGO's superior skills in community level work.

Our primary and secondary research provides useful guidelines for identifying the principles that should inform any new community ILK initiative, and developing the design of a possible community level ILK institution, the *Samudaya Jnana Kendra* (SJK). Part 2 of the report explores in detail the questions of what should such a new institution do, and what will it look like.

Functions of *Samudaya Jnana Kendras*

Section a of Part 2 lists the various community level functions that SJKs could and should perform. We describe the functions under 14 headings, covering

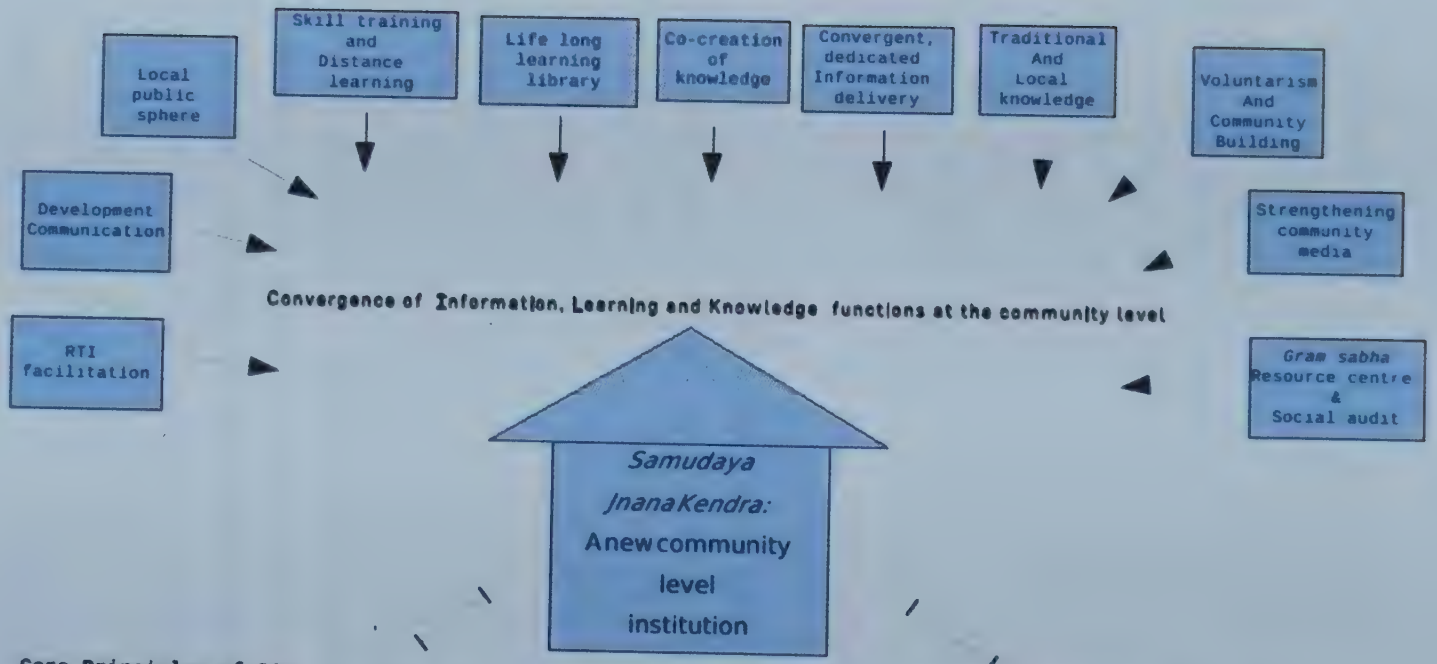
right to information, development communication, skill building, local media, dialogically engaging with traditional and local knowledge to facilitating co-creation of information, assisting social audits and acting as a *gram sabha* resource centre.

The list is indeed long. However, these functions are synergistic, and best performed together, rather than separately. In fact, separately, many of these important functions may not be viable to be successfully carried out. Being able to perform such a range of very important community functions will also enhance SJK's appeal to state and non-state development actors who would be able to support such an initiative, and also motivate community based actors to actively engage and participate. The knowledge society context enables convergence of these ILK functions, and also their separation from service delivery related functions and core political activities. This is a prime design principle that will inform the model of SJKS that we present in Section b of Part 2 of the report.

An Institutional model for *Samudaya Jnana Kendras*

The *Samudaya Jnana Kendras* (SJK) have to be at a place where all sections, even those with less mobility, like women, can easily and regularly access it. There must therefore, eventually, be a SJK in each village. It should work on a public goods model, supported by public resources. As discussed, ILK activities are difficult to monetize successfully. For other reasons too, the SJK should be exclusively devoted to ILK activities, and avoid service delivery activities, to the extent possible. It should have around it, the sanctity that is associated with an institution of knowledge. As the Karnataka Department of Public Libraries notes in one of its documents about libraries, being 'a people's university' should inform the positioning of the SJK.

SJKs will perform core knowledge functions, like of a library and traditional knowledge related activities; development information functions, like interaction with specialists and skill building; and democracy related ILK activities, like assisting social audits and being a gram sabha resource centre. Getting involved in political functions can however be tricky, possibly embroiling the SJK in the divisiveness of local politics. To prevent this, the *panchayats* should *not* directly supervise SJKs. Instead, SJKs should be a body of the *gram sabha*, managed by a *gram sabha* instituted committee. One of


Local public sphere
Skill training and Distance learning
Life long learning library
Co-creation of knowledge
Convergent, dedicated Information delivery
Traditional And Local knowledge
Voluntarism And Community Building
Development Communication
Strengthening community media
Convergence of Information, Learning and Knowledge functions at the community level
RTI facilitation
Gram sabha Resource centre & Social audit
Samudaya Jnana Kendra: A new community level institution

Core Principles of SJK

a) Respect for community autonomy and self-determination of local level ILK processes
b) Supporting a participatory knowledge culture
c)Clear separation of service delivery and ILK functions
d) Deepening democracy at the village level
e) Firm commitment to inclusion of marginalised groups

Structural Elements:

a) Community ownership and management
b)Accountability to *gram sabha*
c) Autonomy in local level functioning with resource support and guidance from a dedicated State agency --*Samudaya Jnana Abhiyan*
d) Co-funded by different departments from their budget for ILK activities
e) Involvement of NGOs in resource support and capacity building of SJK facilitators

the *panchayat* members should represent the panchayat on this committee. Also, strong norms of not getting into divisive politics, (similar to the norms guiding other institutions of knowledge) should be internalised in the SJK system.

As we have seen, much of the failure of existing ILK initiatives can be attributed to the lack of development of a 'participatory knowledge culture'. For adult ILK interactions, especially of the informal kind, development of such a culture is a primary imperative. SJKs would, most of all, be the embodiment of such a local culture of participatory knowledge. The physical space of SJK and all its processes should be informed by this basic principle.

A state level specialised agency, *Samudaya Jnana Abhiyan*, will need to be set up to ensure that the SJK system functions as required. This agency will provide resource support to SJKs and linkages with other departments and agencies to facilitate their ILK activities. But foremost, it will ensure that the principles of 'participatory knowledge culture' are promoted throughout the ILK delivery chain, from top to bottom. It is vain to expect that the village level SJK facilitator will posses qualities that are not (to whatever extent possible) also built upstream in the ILK delivery chain. It may appear to be a formidable task, as indeed promoting true democracy is also almost an impossible challenge. However, having such a normative framework for the SJK system is something that it cannot work effectively without.

Instead of seeing SJKs as an outpost of the government's ILK machinery, the various departments and agencies involved have to see themselves as resource support to the 'primary institution' of SJK. The community/ *gram sabha* ownership of SJKs provides the legitimate basis of such a bottom up relationship. However, these different departments and agencies should be able to seek accountability from the SJK system for fulfilling their community end obligations, for which a proper monitoring and reporting system should be devised through the *Samudaya Jnana Abhiyan*. Since, the SJK system will save these departments and agencies resources that they otherwise commit to community presence, it should be possible to fund the SJK system and the *Samudaya Jnana Abhiyan* through the ILK/ communication budgets of these various 'client' agencies.

The SJK should be run by a *Jnana Sahayaki,* selected by the management committee, and be supported by one or two staff. The selection of right staff

for SJKs is of central importance. They should be appointed on a two year contract, with a transparent but rigorous method of evaluation involving both community and outside actors. District-wise NGOs should be selected to provide very regular training and resource support to the SJK system. A few days of training every month should be compulsory. These, or other, NGOs should also be involved in the monitoring and assessment system. District level management committee for SJKs should involve prominent public interest actors, and it should provide guidance and supervision to the district level presence of the *Samudaya Jnana Abhiyan.*

Since the extensive public library system in Karnataka comes closest to the desired SJK system, and also since the library function will be subsumed into the SJKs, these libraries should be converted to SJKs. However, the much broader vision and functions described for SJKs need to be kept centrally in mind. Also, to learn about how SJKs can be run most effectively, pilots should be launched in some places. Some of these pilots can be conducted by NGOs, and others directly by the proposed *Samudaya Jnana Abhiyan* (or the anchor department) to test different kinds of possibilities. Extensive public consultations should be taken up around the SJK concept, and the outcomes of these should be used to frame new policies, and, as appropriate, new institutional systems in the area of community ILK needs.

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